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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,553	08/24/2006	Thomas Ullein	INA-PT184 (4357-18-US)	8608

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EXAMINER	
AUNG, SAN M	

ART UNIT	PAPER NUMBER
3657	

MAIL DATE	DELIVERY MODE
07/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,553	ULLEIN, THOMAS	
	Examiner	Art Unit	
	SAN AUNG	3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *10-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9, 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is a Second Office Action Final rejection on the merits. Claims 1-16, as originally filed, are currently pending and have been considered below.

Response to Amendment

The amended file May 15, 2009 has been entered. Claims 1, 3, 5, 7-9 have been amended and claim 10-16 have been cancelled. New claim 17 has been added. Therefore, claims 1-9, and 17 are now pending in the application.

Claim Rejections - 35 USC § 103

1. **Claims 1-3, 7-9, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (US Patent 6,308,679 B1), and further in view of White et al. (US Patent 6,155,941).

As per claim 1, Nakamura et al. discloses Separator Structure of Chain Case comprising:

at least one chain or synchronous belt wheel (14, Column 2, Lines 61-62), which is integrated in the drive (Figures 1 and 7) and through which the chain or the synchronous belt is guided and engaged (Figures 1 and 7), as well as with an over-jump protection element (20a, Column 3, Lines 12-13), which at least partially overlaps the chain or the synchronous belt on a side opposite the wheel (Figures 1 and 7), the over-jump protection element is provided on a guiding and tensioning assembly for an adjacent chain or an adjacent synchronous belt (12, 13, Column 2, Lines 58-62).

However, Nakamura et al. fails to explicitly disclose that, the guiding and tensioning assembly including a fixed guiding element with a guide surface and a movable tensioning element with a tensioning surface.

White et al. discloses Hydraulic Tensioner having a Flexible Blade Arm comprising:

the guiding and tensioning assembly including a fixed guiding element (48) with a guide surface (Figures 1 and 2) and a movable tensioning element (16) with a tensioning surface (Figures 1 and 2).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the tensioner assembly of the Nakamura et al. to include the fixed guiding element with a guide surface and a movable tensioning element with a tensioning surface taught by White et al. in order to provide a longer contact patch throughout the life of the geometry of the chain strand at various position.

As per claim 2, Nakamura et al. discloses the adjacent chain or the adjacent synchronous belt (15, Column 2, Lines 61-620 is also guided by a common chain or synchronous belt wheel or a chain or synchronous belt wheel coupled with the common wheel (12, 13, Column 2, Lines 58-62).

As per claim 3, Nakamura et al. discloses the over-jump protection element (2a) is connected integrally to the guiding or the tensioning element of the guiding and tensioning assembly (Column 3, Lines 11-14, and figures 1 and 7).

As per claim 7, Nakamura et al. discloses the over-jump protection element (20a) comprises at least one plate or projection (20a, Column 3, Lines 13), which is

shaped according to outer contours of the chain or synchronous belt to be overlapped (Figures 1and 7) and which projects laterally from the guiding or the tensioning element (Figures 1and 7).

As per claim 8, Nakamura et al. discloses the plate or the projection (20a, Column 3, Lines 13) is supported by a support element that extends to the guiding or the tensioning element (Figures 1 and 7).

As per claim 9, Nakamura et al. discloses the guiding or the tensioning element is a chain or synchronous belt tensioner (20, Column 3, Line 12) integrated in a drive of an oil pump (Column 3, Lines 29-34).

As per claim 7, Nakamura et al. discloses all the structural elements of the claimed invention but fails to explicitly disclose the guide surface of the fixed guiding element and the tensioning surface of the movable tensioning element are adapted to contact an inner surface of the adjacent chain or the adjacent synchronous belt.

White et al. discloses the guide surface of the fixed guiding element (48, Figure 2) and the tensioning surface of the movable tensioning element (16, Figure 2) are adapted to contact an inner surface of the adjacent chain or the adjacent synchronous belt (Figures 1 and 2).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the tensioner assembly of the Nakamura et al. to make the guide surface of the fixed guiding element and the tensioning surface of the movable tensioning element are adapted to contact an inner surface of the adjacent chain or the adjacent synchronous belt taught by White et al. in order to provide

compact structure and also provide a longer contact patch throughout the life of the geometry of the chain strand at various position.

2. **Claims 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (US Patent 6,308,679 B1) and White et al. (US Patent 6,155,941) as applied to claims 1 and 3 above, and further in view of Hoffmann et al. (US Patent 4,869,708).

As per claim 4, Nakamura et al. discloses all the structural elements of the claimed invention but fails to explicitly disclose the element is made from plastic or metal.

Hoffmann et al. discloses the elements is made from plastic or metal (21, Column 2, Lines 27-29).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the elements of the Nakamura et al. to make from plastic or metal taught by Hoffmann et al. in order to provide light weight and low cost mechanism.

As per claim 5, Nakamura et al. discloses all the structural elements of the claimed invention but fails to explicitly disclose the over-jump protection element is a component that is separate from the guiding or the tensioning element and is mounted on the guiding or the tensioning element.

Hoffmann et al. discloses the over-jump protection element is a component that is separate from the guiding or the tensioning element and is mounted on the guiding or the tensioning element (34, Column 2, Lines 63-66, and figure 1).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the over-jump protection element is a component that is separate from the guiding or the tensioning element and is mounted on the guiding or the tensioning element taught by Hoffmann et al. in order to provide ease of assembly onto the engine block.

As per claim 6, Nakamura et al. discloses all the structural elements of the claimed invention but fails to explicitly disclose the over-jump protection element and the element are composed of plastic or metal or of different materials.

Hoffmann et al. discloses the over-jump protection element and the element are composed of plastic or metal or of different materials (21, Column 2, Lines 27-29).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the over-jump protection element and the element are composed of plastic or metal or different materials taught by Hoffmann et al. in order to provide light weight and low cost mechanism.

Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN AUNG whose telephone number is (571)270-5792. The examiner can normally be reached on Mon-to- Fri 7:30 am- to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

San M Aung

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art Unit 3657